RESEARCH PROPOSAL

DETERMINANTS OF ECONOMIC GROWTH: A CROSS COUNTRY ANALYSIS (WITH SPECIAL REFERENCE TO INDIA)

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INTRODUCTION

Economic growth is the central focus of economic theory, and understanding the process of economic growth is of fundamental importance. The phenomenon of economic growth is affected by a variety of factors, and a careful study of the determinants of growth can help a country in achieving sustained economic growth. The concern of economic growth is the increase in the income or per capita income in the medium or long term period. It is a complex process which is influenced by various factors like capital accumulation, population growth technological progress, skill development, foreign trade, government policies of expenditure and taxation, etc. It is actually a dynamic process, which is determined and influenced by a variety of factors, both economic and non-economic.

There is a lot of literature available on economic growth. Economists have analysed various factors which determine economic growth. According to Harrod (1939), the problem of raising the rate of growth is concerned primarily with raising the savings rate and control of the incremental capital output ratio. This approach focuses on capital accumulation. In subsequent works, the rate of growth of labour force and technical progress were also considered as important determinants of growth. Solow (1957), in his pioneering work "Technical Change and the Aggregate Production Function", provided for the decomposition of growth of output into growth of factor inputs (weighted by factor shares) and a residual, which depicts technical progress. However, technical progress was considered as exogenous in the production function. Later, models developed by Arrow (1962), Uzawa (1965), Shell (1973), Lucas (1988) and Romer (1990), emphasized on "endogenous growth".

As far as the empirics are concerned, various cross-sectional studies have been conducted to analyse the process of economic growth, primarily by Kuznets, Chenery, Morris & Adelman, Reynolds and Barro. Chenery and his collaborators found that for developing and middle-income countries, the contribution of Solow's residual was significant in growth.

Though, various theories have been formulated to explain the sources of growth, but there are significant cross-country differences. This is because, specifically for a country, the levels of macroeconomic indicators, such as inflation rate, money supply, human capital formation, fiscal deficit, Foreign Direct Investment (FDI), trade openness, etc. influence economic growth. Different studies, individually for countries, have been conducted so far to assess the impact of these factors on economic growth, and these factors have turned out to be significantly affecting growth.

At the same time, there has been a growing emphasis on the role of state. It is clearly evident that government policies that provide a boost to demand and create a favourable environment for investment, can significantly contribute to growth. On the other hand, certain policies, which cause distortion in resource allocation, can also negatively affect growth.

It is also of utmost importance that how the fruits of economic growth are distributed in the country. Ultimately, economic growth is not the end, it is a means of achieving the end, which is human development. Unless the standard of living of the people improves, everyone has access to health and educational facilities, there is economic and political freedom, responsible citizenship and environmental conservation, there can be detrimental effects of economic growth.

Indian economy has emerged as one of the fastest growing major economies of the world, and has witnessed a very peculiar growth process. After the economic reforms of 1991, the contribution of service sector increased significantly and that of agriculture has declined, there has been a "services led growth". With the ongoing reforms and the challenges of poverty, unemployment, infrastructural constraints, there is certainly a long way to go to realize the growth potential to the fullest.

With the help of sophisticated econometric techniques, it is possible to verify empirically the various factors affecting growth, dealing with both the dependence and causality of factors. The present study is an attempt to identify the determinants of economic growth in a cross-country perspective, with special focus on the Indian economy.

REVIEW OF LITERATURE

Various studies, both theoretical and empirical, have been conducted to determine the factors affecting economic growth of a country. Some of these empirical studies, primarily about the Indian economy and some about other economies, have been reviewed below.

Stern (1991) in his paper "The Determinants of Growth" has traced the history of development of various theories of economic growth, starting from the Harrod Domar growth model. According to him, the study of growth is generally about the medium or long run. It is about the accumulation of physical capital, the progress of skills, ideas and innovation, the growth of population, how factors are used, combined, and managed and so on. It is therefore, principally, about the supply side. There also arises a question that how can, or should, the state influence the rate of growth. In the subsequent work on growth theory, various other determinants of the rate of growth were determined such as rate of growth of the labour force, (as demonstrated by Solow), technical progress, learning by doing, etc. The theory of growth has been stimulated by and has stimulated the documentation and analysis of the empirical growth process by economic historians and statisticians, the notable pioneer being Kuznets, Chenery, Syrquin, Morris, Adelman and Reynolds. After analyzing the models and theories, he concludes that certain factors will have to be taken into account to fully analyze the growth process. These factors are - closer integration of national economies through world markets and the role of trade in technological advance, the role of the distribution of income in the growth process, the perspective of standard of living (which includes health, education, political liberties and the environment)

because there has enough experience of economic development that growth in aggregate income cannot, by itself, be guaranteed to eliminate deprivation.

Iqbal & Zahid (1998) in their paper entitled "Macroeconomic Determinants of Economic Growth in Pakistan" have examined the effects of some of the key macroeconomic variables on Pakistan's economic growth using a multiple regression model for the period 1959-60 to 1996-97. The study concluded that primary education (measures using primary school enrolment-labour force ratio as a proxy of human capital), increasing the stock of physical capital (including infrastructure) and openness of Pakistan's economy (defined as exports and imports of goods) are important factors for accelerating growth (measured in terms of real GDP growth and per capita real income growth). At the same time, the budget deficit and external debt are negatively related to both output growth variables. Thus, the government should focus on providing primary education, provision of adequate physical capital, lowering the budget deficit and rely on domestic resources to finance economic growth.

Daga, et al. (2004) in their paper "Estimation, Analysis and Projection of India's GDP" examined the trend in GDP before and after the economic reforms, and also attempted to formulate a forecast model. It was found that GDP is a stationary process and economic reforms did not lead to a sufficient boost to GDP. The important factors in the model which significantly contributed to GDP were trade, transport, storage and communication while financing, insurance, real estate and business services did not have a significant impact.

Basu & Maertens (2007) in their paper entitled "The Pattern and Causes of Economic Growth in India" have analysed the broad macro parameters of the growth of the Indian economy since the nation's independence and a cross-country evaluation of where India stands, drawing out the patterns discernible in these

aggregative statistics. The paper also analyses the factors behind the changes in India's savings rate and the relation between growth and development, and the nature of labour market. They conclude that if India wants to sustain and raise even higher its current growth, the main bottlenecks in the Indian economy will need to be addressed. These are infrastructure, labour and bankruptcy regulations, and the high level of corruption in the government bureaucracy. In addition, the current erratic and low growth pattern of the agricultural sector, and the rising inequality—between states, between rural and urban areas, and within urban and within rural areas mainly since the 1990s are a concern. The issue of inequality, especially when it results in higher poverty is a serious problem for India. This could lead to political tensions and could destabilize the otherwise optimistic growth scenario. India's trajectory over the last 15 years has been remarkable, but there will truly be reason to celebrate this when the overall gains filter down to the poorest.

Lee & Hong (2010) in their paper "Economic Growth in Asia:
Determinants and Prospects", using a growth accounting framework, have found that developing Asia grew rapidly over the past 3 decades mainly due to robust growth in capital accumulation. The contributions of education and total factor productivity in the region's past economic growth remain relatively limited. Generating baseline projections of GDP growth for a sample of 12 economies for 2011–2020 and 2021–2030 using exogenous values of labor input and human capital, it is found that GDP growth projections for the next 2 decades tend to be lower than the historical performance of the 12 developing Asian economies. However, policy reforms in education, property rights, and research and development can substantially raise GDP growth in the region and partly offset the slowdown in growth caused by the convergence phenomenon. By expanding at robust rates, developing Asia will account for close to two thirds of the world economy in 2030, almost doubling the current 34% share of the region in 2009.

Rahman & Salahuddin (2010) in their paper "The determinants of economic growth in Pakistan: Does stock market development play a major role?" assessed the impact of determinants of economic growth with special focus on stock market development in Pakistan for the period from 1971 to 2006. For the empirical analysis, the methods of Auto Regressive Distributed Lag (ARDL) bounds-testing for the long run relationship and Error Correction Model (ECM) for the short run dynamics were used. The study concluded that there is a positive relationship between efficient stock markets and economic growth, both in short run and long run. Financial instability and inflation have negative effects while human capital, foreign direct investment and stock market liquidity have positive effects on growth.

Goel (2011) in his paper entitled "Determinants of Economic Growth in BRIC Countries" has studied economic growth in four emerging economies - Brazil, Russia, India, and China (BRIC). The study is on medium term growth over 2000-2007 because this is the period that has mainly brought the BRIC nations' growth in focus. The growth equation has been estimated for medium-term growth baseline models using important determinants of economic growth. The results show that while BRIC nations have higher growth, there are significant within-group differences, with China and Russia mostly showing remarkable growth, India sometime showing positive growth and Brazil almost never standing out. Using three measures of institutional quality: the degree of corruption, the degree of cross-country patent protection and the extent of democracy, it turns out that that there is positive association between growth rates and corruption. Greater democracy lowered growth, suggesting that that efficiency considerations were somewhat compromised at the expense of equity issues. The degree of patent protection, on the other hand, failed to exert any appreciable effect on growth. The main policy conclusion is that, given the dissimilar composition of the BRIC

group, the lessons for other nations looking to boost growth by emulating BRIC nations might be limited. Such nations would have to pay careful attention to their own comparative advantages.

Rao & Cooray (2011) in their study "Determinants of the Long-Run Growth Rate in the South-Asian Countries" have attempted to identify some robust determinants of the long-run growth rate in seven South-Asian countries. They have used the technique of extreme bounds analysis of Leamer using panel data for seven countries for the period 1970-2008. Since the steady state growth rate in theoretical growth models depends on total factor productivity (TFP), the long-run growth effects of variables have been estimated by analysing the determinants of TFP. The evidence suggests that the growth effects of investment are relatively smaller compared to other determinants like education. More growth enhancing determinants are female primary enrolment and male secondary enrolment ratios. Countries with a larger and more active financial sector grow faster. Government expenditure has a positive effect on economic growth. The authors also point out that it is important to distinguish between the transient growth effects from the permanent and long-run growth effects of the determinants of growth. Currently used specifications in the cross-country studies are likely to overestimate the growth effects of the determinants by failing to make this distinction.

Tolo (2011) in the working paper entitled "The Determinants of Economic Growth in the Philippines: A New Look" explored the determinants of per capita GDP growth in the Philippines using panel data for 23 emerging economies for the time period 1965–2008. Actually, Philippines was an outlier in terms of agricultural exports, investment, research and development, population growth, and political uncertainty. The study revealed that these factors, along with the deficit, inflation, trade openness, the current account balance and the frequency of crisis episodes are

significant determinants of growth. A growth index confirms that these determinants also capture the absolute and relative performance of each country over time and suggests that the Philippines has lacked a sustained period of relatively strong economic reforms.

Biswas & Saha (2014) in their paper entitled "Macroeconomic Determinants of Economic Growth in India: A Time series Analysis" analyzed both the short run and long run determinants of growth, for the time period 1980-81 to 2010-11. They used techniques of Johansen and Juselius multivariate co-integration test and the Vector Error Correction (VEC) model. It was found that in the long run, factors like capital formation, employment, export, foreign direct investment and money supply have a positive impact on India's growth where as inflation and fiscal deficit have negative impact. In the short run, the GDP growth rate was significantly influenced by capital formation.

Divya & Devi (2014) in their paper entitled "A Study on Predictors of GDP: Early Signals" studied the influence of macroeconomic variables like inflation, exchange rate, foreign exchange reserves, FII's, Sensex, balance of payments and current fiscal deficit on the GDP of India. The time period selected for the study was from 1997-2014 and the methods of correlation and ANOVA were used. It was revealed that exchange rate, sensex and Balance of Payments are the significant predictors of GDP. Thus, appropriate policy measures regarding value of rupee, fluctuations in sensex and adverse balance of payments situation need to be framed.

Ghosh (2014) in his paper entitled "Determinants of Indian GDP growth A Conundrum- A Quantitative Study" explored the dependence of GDP growth rate on macroeconomic variables like Current Account Balance, interest rate, gold reserves, government spending and the exchange rate of currency. He used the

techniques of Principal Component Analysis and multiple regression analysis for 2000 to 2014. Out of all the variables, interest rate turned out to be the most important variable affecting GDP growth.

Boldeanu & Constantinescu (2015) in their paper entitled "The Main Determinants Affecting Economic Growth" have attempted to cover the main factors affecting economic growth as revealed by various studies. The factors included are public expenditure, openness and foreign direct investment and non-economic factors like role of governance, state institutional framework, corruption, political regimes and political instability. The authors conclude that there are many more determinants that are refined and disaggregated to by use into new and advanced models of economic growth. Also as mathematical and statistical models and tests are produced, the old assumptions have to be retested and if differences occur the theory has to be modified. At the same time, there is still not a consensus on the key determinants of growth and an all-encompassing model that includes all the influences has not yet been elaborated.

Das et al. (2015) in their study "Inter-sectoral Linkages in the Indian Economy" developed a macro-model of five sectors- output(real), prices, monetary, government and external; to analyze the inter-sectoral linkages and policy transmission channels using a set of structural equations. The time period was 1980-81 to 2012-13 and method of ordinary least squares was used. It was found that monetary policy instruments affect the real economy. Exchange rate had a direct impact on prices and indirectly affected the net exports and real GDP.

Ismalia & Imoughele (2015) in their paper "Macroeconomic Determinants of Economic Growth in Nigeria: A Co-integration Approach" examined the relationship between economic growth (real GDP) and macroeconomic variables like gross fixed capital formation, labour force, Foreign Direct Investment, ratio of export and import to gross domestic product (for trade openness), inflationary rate

and government expenditure. The time period of the study was 1986-2012 and econometric techniques of Augmented Dickey-Fuller (ADF) test and Johansen's co-integration test were used. The main determinants of economic growth were found to be gross fixed capital formation, foreign direct investment and government expenditure. The analysis shed light on the policy implications that tight monetary and fiscal policies need to be used since inflation had a negative influence on growth. At the same time, infrastructure for lowering the cost of doing business and stringent policies to minimize labor strike are required to tap the growth potential of the economy.

Jain, et al. (2015) in their study "Factors Affecting GDP (Manufacturing, Services, Industry): An Indian Perspective" used the technique of multiple regression analysis to examine the effect of variables like FDI, net FII equity, net FII debt, import and export on the components of GDP, namely manufacturing, industry and services for the time period 2000-2001 to 2011-2012. It was found in the study that there was a significant effect of FDI, Net FII equity and import on GDP components. But net FII did not have a significant impact on the components. In addition, there was no effect of export on manufacturing and industry but on services, there was a significant effect.

Chizonde (2016) in the study "The Macroeconomic Determinants of Economic Growth in Zambia: Do Copper prices matter?" has analysed the growth process in Zambia using the potential determinants of economic growth like government spending and taxes, inflation, exchange rate, employment and physical capital stock. Copper prices and crude oil prices have been included as external factors and agricultural sector contribution to GDP as a control variable. The study uses Bounds test approach to Cointegration for the period 1961 to 2015. It has been concluded that the major determinants of economic growth in Zambia include

government spending, inflation, exchange rate and agricultural development. Copper prices have been found to only influence economic growth fluctuations in the short-run. Thus the focus needs to be shifted away from international copper prices to proper economic management. If the nation is to achieve higher sustainable growth in the future, it should focus on increased public investment, agricultural development and currency devaluation. With sound fiscal and monetary responsiveness, the influence of external shock generated by copper price fluctuations can be managed and Zambia can achieve higher sustainable economic growth.

Ali & Saif (2017) in their paper entitled "Determinants of Economic Growth in Pakistan: A Time Series Analysis (1976-2015)" assessed the causality between economic growth, foreign direct investment, agriculture rate, energy consumption and trade openness from 1976 to 2015.The econometric techniques like ADF unit root test, Johansen and Johansen & Juselius maximum likelihood estimation approach, VECM, impulse response function, variance decomposition and granger causality have were used for the analysis. The study concluded that GDP is affected by agriculture growth rate, energy consumption, trade liberalization and FDI. Also, in short run, trade openness, agriculture growth and energy consumption have positive impact on economic growth, but FDI has negative impact on GDP.

Kharusi & Ada (2018) in their study "External Debt and Economic Growth: The Case of Emerging Economy" investigated the relationship between government's external borrowing and economic growth in Oman for the period 1990-2015, employing the Autoregressive Distributed Lag cointegration approach. It was found that there is a significant and negative influence of external debt on economic growth in Oman. In addition, gross fixed capital was found to be positively significant in determining growth performance. Thus, it can be inferred

that external debt fund should be used for more productive purposes to improve the growth rate.

Wahi & Kapur (2018) in their study "Economic Activity and its Determinants: A Panel Analysis of Indian States" examined the impact of macroeconomic indicators like real interest rate, world output, real effective exchange rate, real bank credit and fiscal variables (fiscal deficit or revenue deficit or capital outlay) on output (gross value added). The system Generalized Method of Movements (GMM) approach of Arellano-Bond-Bover were used to estimate the model, using panel data for Indian states for the period 2007-08 to 2015-16. Both global and domestic factors affect aggregate demand. It was revealed that tighter monetary policy and an appreciation of the exchange rate control demand, while an accommodative monetary policy and exchange rate depreciation provide a boost to demand. There is positive relationship between bank credit expansion and economic activity, suggesting the role of credit channel of transmission in along with the interest rate channel. Public investment was found to support economic activity, while other fiscal spending crowds out private sector activity. Thus, a prudent fiscal policy, in conjunction with spending oriented towards capital outlays, can boost output.

RELEVANCE OF THE STUDY

The study will take recent data into account, and will focus on the determinants of economic growth in recent time. The determinants of growth will be analyzed using panel data for selected economies, classified into the following four categories, according to the Word Bank classification:

- Low-income economies
- Lower-middle-income economies
- Higher-middle-income economies
- High-income economies

Thus, the study attempts to identify the determinants of growth in respect of these four categories.

Then a time series analysis of the factors which have affected the growth process of India in the recent time will be undertaken. Some factors have positively contributed to the growth process, while others have adverse effects. This analysis will therefore focus on in-depth analysis of determinants of economic growth in India.

OBJECTIVES AND METHODOLOGY

Objectives:

This is an exploratory study, whose major objectives will be:

1. To identify the key determinants of economic growth in an international perspective by using panel data related to four categories of countries:
   - Low-income economies
   - Lower-middle-income economies
   - Higher-middle-income economies
   - High-income economies
2. To identify the determinants of economic growth in India using time series data.

Hypotheses:

Null hypothesis: The various factors considered in the study do not affect economic growth.

Alternative hypothesis: The various factors considered in the study significantly affect economic growth.

Methodology:

The study will be based on both time series and panel data. Data on different indicators for various countries of the world will be collected. Some of the indicators, which are commonly referred to in growth literature, are: fixed capital formation, human capital, trade openness, foreign direct investment, inflation rate, money supply, fiscal deficit, etc.

The data will be analysed using statistical and econometrics tools like averages, index numbers, cointegration, panel data models, etc.

Data source- The secondary data will be collected from online data available on websites of World Bank, IMF, RBI, CSO, NITI Aayog, etc.

Time period- As the focus of study is on the determinant of economic growth in recent time, the time period will be from 1991 to the latest year for which data are available.

TENTATIVE CHAPTER SCHEME

Chapter 1: Introduction

-About the study

-Objectives and Methodology

Chapter 2: Review of Literature

Chapter 3: Theory of Determinants of Economic Growth

Chapter 4: Determinants of Economic Growth in International Perspective using Panel Data

Chapter 5: Determinants of Economic Growth in India- A Time Series Analysis

Chapter 6: Summary and Conclusion

REFERENCES

- Ali, A. & Saif, S. (2017). Determinants of Economic Growth in Pakistan: A Time Series Analysis (1976-2015) [PDF file]. *European Online Journal of Natural and Social Sciences 2017, Vol. 6*(4), 686-700. Retrieved from http://european-science.com/eojnss/article/viewFile/5101/pdf
- Basu, K. & Maertens, A. (2007). The Pattern and Causes of Economic Growth in India [PDF file]. *Oxford Review of Economic Policy, Vol. 23*(2) 143-167. Retrieved from www.kaushikbasu.org/(2007)_The Pattern and Causes_Oxford Review of Economic Policy.pdf
- Biswas, S. & Saha, A.K. (2014, June). Macroeconomic Determinants of Economic Growth in India: A Time series Analysis [PDF file]. *SOP Transactions On Economic Research, Vol. 1*(2), 54-72. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.904.3228&rep=rep1&type=pdf
- Boldeanu , F.T. & Constantinescu, L. (2015).*The Main Determinants Affecting Economic Growth* [PDF file]. Retrieved from http://webbut.unitbv.ro/BU2015/Series%20V/BILETIN%20I/38_Boldeanu%20Constantinescu.pdf
- Chizonde, B. (2016). *The Macroeconomic Determinants of Economic Growth in Zambia: Do Copper prices matter?* [PDF file]. Retrieved from https://mpra.ub.uni-muenchen.de/87854/1/MPRA_paper_87854.pdf
- Daga, U.R., Das, R., & Maheshwari, B. (2004). *Estimation, Analysis and Projection of India's GDP* [PDF file]. Retrieved from https://mpra.ub.uni-muenchen.de/22830/1/MPRA_paper_22830.pdf
- Das, R., Bhoi, B.B., Kumar, P., & Banerjee, K., (2015 March). *Inter-sectoral Linkages in the Indian Economy* [PDF file]. Retrieved from https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=16425
- Divya, K.H., & Devi, V.R. (2014). A Study on Predictors of GDP: Early Signals [PDF file]. *Procedia Economics and Finance, Vol.11*, 375 – 382. Retrieved from https://www.sciencedirect.com/science/article/pii/S2212567114002056

- Goel, R.K. (2011). *Determinants of Economic Growth in BRIC Countries* [PDF file]. Retrieved from http://www.inesad.edu.bo/pdf/wp2011/wp05_2011.pdf
- Ghosh, B. (2014). Determinants of Indian GDP growth A Conundrum- A Quantitative Study [PDF file]. *International Journal of Social and Economic Research, Vol. 4*(4), 77-88. Retrieved from doi: 10.5958/2249-6270.2014.01119.2
- Iqbal, Z. & Zahid, M.Z. (1998). Macroeconomic Determinants of Economic Growth in Pakistan [PDF file]. *The Pakistan Development Review, Vol.* 37(2), 125-148. Retrieved from https://core.ac.uk/download/pdf/7202910.pdf
- Ismalia, M. & Imoughele, L.E. (2015). Macroeconomic Determinants of Economic Growth in Nigeria: A Co-integration Approach [PDF file]. *International Journal of Academic Research in Economics and Management Sciences 2015, Vol. 4*(1) 34-46. Retrieved from http://dx.doi.org/10.6007/IJAREMS/v4-i1/1485
- Jain, D., Nair, K.S., & Jain, V. (2015, April). Factors Affecting GDP (Manufacturing, Services, Industry): An Indian Perspective [PDF file]. *Annual Research Journal of Symbiosis Centre for Management Studies, Pune , Vol.* 3, 38–56. Retrieved from https://scmspune.ac.in/chapter/Chapter%203.pdf
- Kharusi, S. A. & Ada, M. S. (2018 March). External Debt and Economic Growth: The Case of Emerging Economy [PDF file]. *Journal of Economic Integration Vol. 33*(1), 1141-1157. Retrieved from https://www.e-jei.org/upload/JEI_33_1_1141_1157_2013600154.pdf
- Lee, J.W. & Hong, K. (2010). *Economic Growth in Asia: Determinants and Prospects* [PDF file]. Retrieved from http://library.umac.mo/e_resources/org_publications/b11823537.pdf
- Rahman, M. M. & Salahuddin, M. (2010). The determinants of economic growth in Pakistan: Does stock market development play a major role? [PDF file]. *Economic Issues, Vol. 15*(2), 69-86. Retrieved from http://www.economicissues.org.uk/Files/210Rahman.pdf

- Rao, B.B. *&* Cooray, A. (2011). *Determinants of the Long-Run Growth Rate in the South-Asian Countries* [PDF file]. Retrieved from https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://www.google.com&httpsredir=1&article=1244&context=commwkpapers
- Stern, N. (1991). The Determinants of Growth [PDF file]. *The Economic Journal, Vol. 101*(404), 122-133. Retrieved from http://personal.lse.ac.uk/sternn/063NHS.pdf
- Tolo, W.B.J. (2011). *The Determinants of Economic Growth in the Philippines: A New Look* [PDF file]. Retrieved from https://www.imf.org/en/Publications/WP/Issues/2016/12/31/The-Determinants-of-Economic-Growth-in-the-Philippines-A-New-Look-25418
- Wahi, G. & Kapur, M. (2018 April). *Economic Activity and its Determinants: A Panel Analysis of Indian States* [PDF file]. Retrieved from https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=18441